Keeping California Safe and Fed through a Food System Resilience Network

Assurance of ongoing access to safe affordable foods for all – even in the midst of a pandemic and market disruptions – requires that California take action, now. A network of support to accelerate the pace and scale of building such resiliency requires an investment to link resources, knowledge, and actions across agencies and organizations. The Food System Resilience Network plays a critical role, providing essential capacity, coordination, and science-based solutions. This Food System Resilience Network’s success will provide food for all Californians, each and every day.

A Focus on Food Systems

There is a new urgency for a resilient food systems. COVID-19 revealed the brittle and fragile nature of our current food system. Sudden changes in supply chain distribution systems occurred. Restaurants and schools no longer needed to purchase food. Cancelled orders resulted in markedly reduced, or absent, markets for fresh fruits and produce and other food staples. Milk, once packaged and sold to meet school and restaurant needs, had no market. Highly perishable foods, unable to withstand extended storage, or crops already in the field, were destroyed, plowed under, with no market. Simultaneously, shelter-in-place orders resulted in an overnight surge in the demand for products packaged for home consumption. Bottling of milk for home use was at capacity, and excess milk was dumped when all processing lines were maximized. The U.S. food system was unable to make a widespread change to alternative packaging. COVID-19 infection of workers at any stage of food production halted activity at individual locations. While farm-scale disruptions went largely unnoticed, disruptions at packaging or distribution locations drew considerable attention and translated to empty shelves. The system struggled to have food in the right form, for the market to handle and, as a result, too many Californians went hungry. Prevention of future failures requires reinforcement of the food system at all levels of the supply chain.

Building a resilient food system requires inclusion of micro to large scale growers, packers, and distributors at the local to national scale. Redundancy, without compromising affordability, is essential. Networks of growers, packers, and sellers are essential. Much work is needed to convene the pieces and study best practices necessary for success at the local level.
Opportunity and the Outcomes

A resilient food system requires an understanding of the components of the food system (See Figure) - the stressors, and necessary responses. Necessary, too, are connections across the network to develop infrastructure that facilitates a rapid response. A cohort of applied researchers, focused on convening and communicating with components of the local food system, can directly engage county and city governments, food system growers, processors, distributors and markets, county planners, non-profit organizations, and the public to reduce California’s social and ecological vulnerabilities to food system shocks.

As a cohort, the Food Systems Resilience Network, collects local data to identify successful practices, options and needs to implement, including necessary redundancies, braces, or inefficiencies. Using recent events, the cohort can study what worked and what didn’t, where the food system demonstrated flexibility and pivot points, and what attributes enabled system evolution, such that bakeries were able to meet flour needs, small-scale local meat shops quickly began direct marketing to restaurants, restaurants became a form of a local grocer. As a cohort, the team facilitates and empowers the local community to build its own food resiliency, from farmer to consumer.

Impacts

A resilient food system ensures Californians have ongoing access to healthy, nutritious food. The long term consequence of a Food System Resilience Network is improved community health, reduced health care costs, a vibrant agriculture economy, and improved quality of life.

Who We Are

UC Cooperative Extension (UCCE) experts help build stronger and resilient communities through leadership, outreach and technical skills in natural resources, agriculture, nutrition, youth development and community health. The UCCE network is embedded with county governments and communities throughout California and provides direct access for communities to the extensive, world renowned and impactful research of the full University of California system. As a trusted long-term partner (>100 year history), UC ANR provides educational delivery that empowers communities at every level. UC ANR evaluates and develops practices, disseminates new research and innovations through trainings and guidance documents, provides coordination and capacity for local and state-level collaborative implementation and policy efforts, and helps identify and promote appropriate policies. UC ANR has an existing network of professionals to provide guidance, expertise, and coordination on food systems throughout the state. This effort will offer much needed support to bolster those efforts and fill critical needs.